

### Claims

1. An Active-Matrix panel for flat panel display, said panel comprising a mechanical substrate and an active matrix including switching elements, characterised in that the active matrix is comprised of an assembly of universal module units (12) mounted  
5 on a common mechanical substrate (10), each of said module units being adapted to form a grid of pixels, and in that the panel comprises module identification means (14) for identifying the location of each universal module unit in the assembly, a serial bus (16) including a number of conducting lines for providing data signals and power to the universal module units (12), and contact means arranged to selectively couple the serial bus to the  
10 universal module units for selectively applying said data signals and power to each module to selectively activate pixels therein.
2. A device as claimed in claim 1, wherein the universal module units are hexagonal and/or half-hexagonal shaped.
3. A device as claimed in either of the preceding claims, wherein the universal  
15 module identification means (14) comprise a code pattern positioned underneath each universal module unit.
4. A device as claimed in either of the preceding claims, wherein each pixel (11) is subdivided into a plurality of sub-pixels (13), thereby allowing a great number of different gray levels to be produced when a bias is selectively applied thereto.
- 20 5. A device as claimed in either of the preceding claims, wherein a number of pixels (11) are assigned to each primary color and wherein each pixel (11) is subdivided into a plurality of sub-pixels (13).
6. A device as claimed in either of the preceding claims, wherein the arrangements for the different primary colors are stacked on top of each other.
- 25 7. A device as claimed in either of the preceding claims, wherein the serial bus (16) is formed in a serpentine-like shape.
8. A device as claimed in either of the preceding claims, wherein the serial bus (16) is formed on the mechanical substrate (10).
9. A device as claimed in either of the preceding claims, wherein non-volatile  
30 memory is co-integrated with the switching elements for each pixel.
10. A device as claimed in either of the preceding claims, wherein the active matrix is fabricated using Vertical MOSFET devices.
11. A device as claimed in either of claims 1 to 9, wherein the active matrix is fabricated using SD-CMOS technology.